

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Natchitoches Plant
Weyerhaeuser Company
Natchitoches, Natchitoches Parish, Louisiana
Agency Interest Number: 3782
Activity Number: PER20060001
Draft Permit 1980-00016-V3**

I. APPLICANT:

Company:

Weyerhaeuser Company
234 Industrial Avenue, Natchitoches, LA 71457

Facility:

Natchitoches Plant
234 Industrial Avenue, Natchitoches, Natchitoches Parish, Louisiana
Approximate UTM coordinates are 491.20 kilometers East and 3518.10 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

Natchitoches Plant, an existing laminated lumber manufacturing facility, began operation prior to 1973. Permit Number 1980-00016-01 was issued to the facility on January 16, 1985, and was modified in 1986, 1992, and 1994. Initial Part 70 Operating Permit Number 1980-00016-V0 was issued to the facility on June 25, 1997, and modified on April 29, 1999. The Natchitoches Plant currently operates under Permit No. 1980-00016-V2, issued February 18, 2003.

III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

A permit application and Emission Inventory Questionnaire were submitted by Weyerhaeuser Company on February 17, 2006, requesting a Part 70 operating permit. Additional information submitted March 3, 2006, was also received.

With this modification, Natchitoches Plant proposes to:

- Remove Press No. 1 from the permit, but continue to utilize the vents from the source as building ventilation.
- Route emissions from Press No. 2 (EQT 9) to the Press 2/9/10 Cyclone (EQT 6)

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- Replace the I-Line Cyclone with the I-Line Baghouse (EQT 5)
- Consolidate the front, middle, and back vents for each press into one emission point per press
- Increase engineered lumber production from 1,080 ft³/hr to 1,484 ft³/hour
- Consolidate the front and back vents for the I-Line Oven (EQT 14) into one emissions source
- Replace the Web Line Cyclone with the Web line Baghouse (EQT 7)
- Establish a Press Cap (GRP 2)
- Update emissions estimates using current emission factors
- Incorporate additional insignificant activities
- Add a 20 ft heated section to each press

Project Description

The Natchitoches Plant produces unique laminated lumber products. During the pressing process, dry veneer is fed into a laminated lumber machine, which applies glue adhesives, stacks the veneer sheets, and hot presses the sheets together with a steam heated press producing the laminated lumber. This process can generate particulate matter and VOC emissions from the pressing of the adhesive. The laminated lumber is cut to length and width with various saws. Sawdust and wood waste are generated during various stages of operation and are contained by the pneumatic vacuum system. The collected air and dust are separated with a system of cyclones, which serves to minimize the release of collected particulates into the atmosphere. A natural gas fired boiler is used to produce steam for heating the presses.

In addition to laminated board production, wooden I-beams are produced at the site using laminated lumber products. For this process, the laminated lumber products are glued together with web stock using a catalyst driven adhesive and then placed in a bake oven for curing. After curing, the I-beams are checked for product quality and prepared for shipping.

Section 6 of the Permit Application, dated May 1, 2003, lists the permitted emission rate before and after the project (in tons per year) for each emission point in the permit. These changes are summarized in the Permitted Air Emissions Section.

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Permitted Air Emissions

Estimated changes in permitted emissions in tons per year are as follows:

| <u>Pollutant</u> | <u>Before</u> | <u>After</u> | <u>Change</u> |
|------------------|---------------|--------------|---------------|
| PM ₁₀ | 168.96 | 206.00 | + 37.04 |
| SO ₂ | 0.09 | 0.08 | - 0.01 |
| NO _x | 19.15 | 19.14 | - 0.01 |
| CO | 40.29 | 40.29 | - |
| VOC* | 233.73 | 227.27 | - 6.46 |

*VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

| <u>Pollutant</u> | <u>Emissions</u> |
|------------------|------------------|
| Benzene | < 0.001 |
| Formaldehyde | 6.79 |
| Methanol | 55.30 |
| Phenol | 2.57 |
| Total | 64.66 |

Prevention of Significant Deterioration Applicability

The pollutants are not being increased by significant amounts by the project. Therefore, the proposed facility is not subject to the requirements of the PSD program.

This application was reviewed for compliance with the Louisiana Part 70 operating permit program, NESHA, and Louisiana Air Quality Regulations. NSPS regulations do not apply.

MACT Requirements

Natchitoches Plant is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. Methanol is emitted in an amount in excess of the major source threshold. Formaldehyde, methanol, and phenol each exceed their respective Minimum Emission Rate (MER). MACT for this facility is to test each batch of LVL resins for phenol and formaldehyde and I-Line resins for phenol concentrations. Any time that the I-Line resin formulation changes, it must be tested for the presence of formaldehyde. Phenol concentrations must remain below 0.10% by weight for LVL resins and 9.0% by weight for I-Line resins. Formaldehyde

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concentrations must remain below 0.09% by weight for LVL resins and 0.003% by weight for I-Line resins.

The facility complies with the ambient air standards (AAS). This facility will be subject to 40 CFR 63 Subpart DDDD-Plywood and Composite Wood Products and submitted an initial notification report on January 20, 2005. This facility will be subject to 40 CFR 63 Subpart DDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters and submitted an initial notification report on March 11, 2005.

Air Modeling Analysis

No dispersion modeling was performed.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

Regulatory Analysis

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit.

IV. Permit Shields

There is no permit shield.

V. Periodic Monitoring

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Weyerhaeuser Company is required to monitor and record opacity on a daily basis using EPA Reference Method 22 for all cyclones and baghouses in order to assure compliance with LAC 33:III.1311.C.

Weyerhaeuser Company is required to monitor and record the presence of visible emissions above those observed during normal operations on a weekly basis using EPA Reference Method 22 for all press vents in order to assure compliance with LAC 33:III.1311.C.

Compliance Assurance Monitoring

Federal regulation 40 CFR 64-Compliance Assurance Monitoring is not applicable to this facility.

| VI. Applicability and Exemptions of Selected Subject Items | | |
|---|--|--|
| ID No: | Requirement | Notes |
| EQT 1 | NSPS Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [40 CFR 60.40c] | DOES NOT APPLY. Units constructed prior to June 9, 1989. [40 CFR 60.40c(a)] |
| | Emission Standards for Sulfur Dioxide [LAC 33:III.1503] | EXEMPT. Units emit less than 250 tons of SO ₂ per year. [LAC 33:III.1503.C] |
| EQTs 9-14 | Waste Gas Disposal [LAC 33:III.2115] | EXEMPT. Waste gas has a VOC concentration of less than 30,000 ppm. [LAC 33:III.2115.H.1.d] |

| VII. Streamlined Requirements | | | |
|--------------------------------------|-----------------------------------|-----------------------------|---------------------------------------|
| Unit or Plant Site | Programs Being Streamlined | Stream Applicability | Overall Most Stringent Program |
| Natchitoches Plant | None | - | - |

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VIII. Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Carbon Monoxide (CO) - A colorless, odorless gas which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Sulfide - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to

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ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulphur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.